

# **The possibility of using a shallow seismic in detailing the structure of heavy oil reservoirs at the stage of exploration in conditions of the western slope of the South-Tatar arch**

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## **Abstract**

The technique of research, especially graph processing and the results of shallow seismic survey on Varvarkinskaya heavy oil reservoir located within the western slope of the South Tatar arch are presented in this article. It is found that the kinematic and dynamic parameters of the reflected waves react to heterogeneity of the structure of productive sandstone member Ufimian time (P2ss). The obtained results allow us to consider shallow seismic as a potential tool for refinement heavy oil drainage boundary and structural features of the reservoirs in the geological conditions of the western slope of the South Tatar arch.

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## **Keywords**

Digital signal processing, Heavy oil, Seismic attribute, Shallow seismic